DECISION RECORD

Decision: It is my decision to authorize the issuance of a term grazing lease of public lands on the Daniel F. Adams, Adams Ranch, Allotment #63002. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR 4160.3 (c))

signed by T. R. Kreager — 1/17/01
Assistant Field Manager — Date

ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

ALLOTMENT 63002

Township 1 South, Ranges 14 and 15 East
Various Sections
NMPM, Lincoln County

EA-NM-060-00-079

APRIL, 2000

U.S. Department of the Interior
Bureau of Land Management
Roswell Field Office
Roswell, New Mexico

ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

Allotment 63002
Township 1 South, Ranges 14 and 15 East
Various Sections
NMPM, Chaves County
EA-NM-060-00-079
April, 2000

I. Introduction

A. Purpose and Need for the Proposed Action

The grazing regulations (43 Code of Federal Regulations 4110) allow for a ten-year permit to be issued for grazing inside the grazing district boundary and ten year leases on allotments outside the grazing district boundary. The Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS) (October 1997) states a livestock grazing management goal of providing effective and efficient management of allotments to maintain, improve and monitor range conditions. A site specific analysis of the impacts of issuing a grazing lease to the applicant, Daniel F. Adams, is needed for compliance with the National Environmental Policy Act (NEPA) and to make an informed decision.

This document will analyze the site specifics of authorizing the issuance of the lease on Allotment 63002 (Adams Ranch), other future actions such as range improvement projects will be addressed in a project specific environmental assessment. There are no current plans for additional management actions on this allotment. This allotment is within the Pinon-Juniper vegetative community, the Mixed Desert shrub vegetative community, the Drainages, Draws and Canyons community, and the Grassland community as identified in the Roswell RMP/EIS. Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community.

B. Conformance with Land Use Planning

The Roswell RMP/EIS has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision. The Roswell RMP/EIS states a livestock grazing management goal of providing effective and efficient management of the allotment to maintain, improve and monitor range conditions. The proposed action is consistent with the RMP/EIS.

C. Relationships to Statues, Regulations, or Other Plans

The proposed action is consistent with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (TGA) (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (ESA) (16 U.S.C. 1535 et seq.) as amended; and the Public Rangeland Improvement Act of 1978 (PRIA) (43 U.S.C. 1901 et seq.)

II. Proposed Action and Alternatives

A. Proposed Action

The proposed action is to authorize a grazing lease on Allotment 63002 (Adams Ranch.) for 3 Animal Units (AUs) year long at100 percent public land for 44 Animal Unit Months (AUMs). The permit would be offered to Daniel F. Adams.

B. No Authorization Alternative

This alternative, if selected, would be to not issue a grazing lease for Allotment 63002. No grazing would be authorized on the federal land within the allotment.

III. Affected Environment

A. General Setting

Allotment 63002 is located in Lincoln County, approximately 10 miles east of Corona, New Mexico. The allotment is made up of fourteen pastures and traps, however, the public lands are contained in two pastures. The allotment is watered by eight wells, a water pipeline system, and nine dirt tanks. The allotment consists of 160 acres of public land, approximately 9,720 acres of private land, and 3,478 acres of State leased land. (See attached map).

Allotment 63002 (Adams Ranch) lies outside the Roswell Grazing District Boundary, established subsequent to the Taylor Grazing Act (TGA), and is administered under Section 15 of the TGA. The permitted use on this Section 15 lease is established by the amount of forage produced on the public lands due to the relatively small amount of public land in relation to the large amount of private holdings. During the late 1930's and 40's the Bureau of Land Management (BLM) and the allottee at that time agreed to the number of stock the ranch could run. Since then, BLM Roswell has been very involved in vegetation monitoring and range evaluations. Using these data adjustments to stocking rates and total numbers has been made on allotments throughout the resource area.

The area of Allotment 63002 consists of rolling grass covered hills, with a mixed desert shrub/pinon-juniper aspect. The average elevation ranges from 6100 to 6800 feet above sea level. Grass species make up 88 percent of the production in the existing plant community. The 1998/98 recorded precipitation for the area was 18.58 inches (recorded in Corona, NM). Most of the annual precipitation falls during high intensity, short duration thunderstorms occurring from May to October.

The following resources or values have been evaluated and are either not present or are not affected by the proposed action or alternatives in the EA: Prime/Unique Farmlands, Cultural Resources, Native American Religious Concerns, Invasive, Non-Native Species, Floodplains, Riparian Areas, Wild and Scenic Rivers, Hazardous Wastes, and Areas of Critical Environmental Concern. The impact of the proposed action and alternative to minority or low-income populations or communities has been considered and no significant impact is anticipated.

B. Affected Resources

1. Soils

The soils present on the public lands within Allotment #63002 are the Penistaja-Travessilla association, and the Rock Outcrop, Stroupe-Deama association, extremely steep.

The Penistaja-Travessilla association soils are on the piedmonts, low ridges and valley sides, with slopes of 0 to 2 percent. The Penistaja soils is very deep and well drained. It is formed in alluvium derived dominantly from sandstone. Permeability is moderate, efffective rooting depth is 60 inches or more. Available water capacity is high, runoff is medium and the hazard of water erosion is moderate. The Travessilla soil is very shallow and well drained. It is derived dominantly from sandstone. Permeability of the Travessilla soils is moderately rapid, effective rooting depth is 6 to 20 inches. Available water capacity is very low. Runoff is rapid and the hazard of water erosion is high. The hazard for both soils of soil blowing is high.

The Rock outcrop-Stroupe-Deama association, extremely steep, is found on hills, breaks and mesa sides. Slopes are from 30 to 75 percent. Rock outcrop consists of areas of exposed limestone and sandstone. Surface runoff is rapid. The Stroupe soil is moderately deep and well drained and is formed in sediment derived from sandstone, shale and igneous rock. Permeability of the Stroupe soil is slow. Effective rooting depth 20 to 40 inches. The Deama soil is very shallow and well drained. It is formed in material derived dominantly from limestone. Permeability of the Deama soil is moderate. Effective rooting depth is 7 to 20 inches. Available water capacity for the Stroupe and Deama soils is very low, runoff is rapid and the hazard of water erosion is high. The hazard of soil blowing is slight.

More information on these soils can be found in the "Soil Survey of Lincoln County Area, New Mexico".

2. Vegetation

The vegetation on the public land within Allotment #63002 fits two major range sites: Shallow Sandstone CP-3 and Breaks CP-3. In the Shallow Sandstone CP-3 Range site sideoats grama, little bluestem, black grama, blue grama and hairy grama are the most abundant grasses, while galleta, NM feathergrass and needle & thread grass are also found. Shrubs such as pinon, juniper, skunkbush and algerita are also found on this range site. Forbs which may occur in this area are Indian paintbrush, fetid marigold and globemallow.

The Breaks CP-3 Range site, found on generally on the steeper soils with the most amount of slope, has a high percentage of sideoats grama, little bluestem, blue grama, wolftail and hairy grama. Other grasses noted in this site are curlyleaf muhly, mountain muhly, New Mexico muhly, and spike muhly. The shrubs found here are oak species, mountainmohogany, pinon, juniper and sumac. Forbs include buckwheat, Indian paintbrush and penstemon. The forb component in all of the range sites varies from year to year, dependent upon the amount and timing of precipitation.

3. Wildlife

The area provides habitat for small animals, birds, rodents, and a sustainable population of mule deer. The area does contain motts of brush or tree species that could provide quality cover for the larger animals.

4. Threatened and Endangered Species

The only known threatened or endangered species of plant or animals on Allotment 63002 is the bald eagle. A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2). Of the listed species, avian species such as the bald eagle may be observed in the general geographic area during migration or winter months. There are no designated critical habitat areas within this allotment.

The swift fox is a Federal Candidate species that may occupy or utilize the area; refer to the Biological Opinion (AP11-38) in the Roswell RMP for a detailed description of the range, habitats and potential threats.

A bird, the mountain plover, has been recently proposed for listing as an Endangered Species. It is associated with shortgrass and shrub-steep landscapes throughout its breeding and wintering range. Historically, on the breeding range, it occurred on nearly denuded prairie dog towns and in areas of major bison concentration. The mountain plover are considered to be strongly associated with sites of heaviest grazing pressure, to the point of excessive surface disturbance. Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales.

The black-tailed prairie dog has also been recently proposed for listing as a Threatened Species. It is also associated with shortgrass and midgrass prairies and grass-shrub habitats. Formerly, they were widespread and abundant east of the Rio Grande and in the grasslands of southwestern New Mexico. Colonies were reported in marginal habitat, such as open woodland, and in the southwestern part of the state they occupied semidesert conditions. They have also been reported in former shinnery savannahs which have been converted to shortgrass-like habitat. The species is herbivorous, apparently preferring various species of grasses over other available vegetation in their desert grassland habitat. They eat a wide variety of grasses, weeds, and shrubs, feeding on the stem, leaves, and seeds. These provide moisture as well as food. Grasses are clipped close to the ground to allow for a greater range of sight and the digging actions contribute to enhancing soil composition and forb growth. Roots are dug when this food supply is required. Food items are apparently not stored below ground. The black-tailed prairie dog lives in colonies or towns, which cover from one acres to tens-of-thousands of acres. They remain active all year long, but during extremely cold weather events will remain underground for several consecutive days. They dig extensive, deep and permanent burrows with a dome-shaped mound at the entrance. Nest cavities are in the deeper parts of the burrows. No prairie dog towns are known to exist on this allotment.

5. Livestock Management

The allotment is grazed by cattle, using a cow-calf operation. The latest grazing lease on Allotment 63002 (Adams Ranch) was for 3 cows. The livestock are rotated in and out of the two pastures containing the public land, and are moved to pastures which are all private and state leased lands. The two pastures are given a "growing season" rest, from July to September, approximately every two to three years. When conditions are dry, the stocking rate across the ranch is reduced, by removal of some to all of the livestock.

6. Visual Resources

Allotment 63002 are located in a Class IV Visual Resource Management (VRM) Area. In the Class IV area contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Water Quality

Domestic water wells, and dirt tanks are the surface water on the ranch, none of which are located on public land. The amount of water and period of retention in the dirt tanks is dependent on the weather conditions. Ground water is pumped from the drilled domestic wells. The quality of the well water is adequate for livestock and wildlife use.

8. Floodplains

Within this allotment no floodplains exist that are recorded on Federal Emergency Management Agency maps. The canyons contained within the ranch include Round Top Canyon and Taylor Canyon. Only Round Top Canyon is located adjacent to the public lands. These are considered to be dry arroyos.

9. Air Quality

Air quality is good. The area is in a Class II area for the prevention of significant deterioration of air, as defined in the federal Clean Air Act. Class II areas allow a moderate amount of air quality degradation.

10. Recreation, Caves and Karst

Recreation: Dispersed recreational opportunities exist in Allotment 63002 as access to the public land is limited. Dispersed recreational activities include hunting, caving, sightseeing, bird watching, primitive camping, mountain biking, horseback riding and hiking. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails. The public lands in this allotment can be accessed by foot (hiking, or walking) or by two-track roads.

Caves and Karst: Allotment 63002 is located within designated areas of Medium and High Karst and Cave Potential.

Although a complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment, no known significant cave or karst features are known to exist within this allotment.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soils

The soils will be influenced by livestock grazing directly by compaction, trailing that may break through the turf, chipping of soil surface caused by hoof action, and recycling of nutrients. Infiltration rates are increased by chipping of soil surface over most of the area but will be decreased by compaction around watering, trailing, and bedding areas. The area of compaction would be relatively small. Livestock remove vegetation that would have reduced the erosive forces of wind, rain and surface runoff. Proper utilization levels and grazing distribution patterns under the present operation retain sufficient vegetative cover so as to maintain the stability of the soils. The level of grazing identified in the proposed action would continue to maintain an adequate ground cover for protection and the development of the soils. The percentage of bare ground and rock found on the public land within the allotment fall within the parameters established by the RMP/EIS for these vegetative communities.

2. Vegetation

There is one vegetative study on this allotment, established in 1982. Ecological condition as shown by the data collected from 1982 through 1999 indicate the vegetation is sustainable at the proposed amount of grazing by livestock. The most recent data show the ecological condition for the area evaluated to be in good condition. Vegetation studies indicate that the diversity and amount of vegetation present meets the multiple resource requirements and will support the number of livestock proposed for this allotment. Copies of the monitoring data and the analysis of the data are available at the Roswell Field Office.

3. Wildlife

Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and it's habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover habitat for wildlife will remain the same as the existing situation. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock

4. Threatened and Endangered Species

Livestock grazing as a result of the grazing lease, May affect, but not likely adversely affect the bald eagle. It is expected that habitat and range condition would be maintained or improved by authorizing grazing conducive with vegetation production goals. Habitat for wintering bald eagles would not have significant negative impacts by livestock grazing since there is no presence of riparian habitats nearby, and no active or suitable nesting habitat. Positive impacts may result to the bald eagle from the proposed action by increasing the amount of carrion during the late winter and early spring in sheep allotments.

Surveys have been conducted in New Mexico for the mountain plover by Lawry Sager in 1995, for the New Mexico Department of Game and Fish (Sager, 1996). No known breeding populations or wintering locales were found in the Roswell Field Office area. In addition, mountain plover surveys were conducted in 1998 at BLM selected sites by New Mexico Natural Heritage Program (DeLay & Johnson, 1998). No mountain plovers were observed at the sites. As mountain plovers prefer short vegetation and actually seek out grazed pastures, the cumulative impacts from grazing are not anticipated to adversely affect the bird. Grazing practices which maintain or improve ground cover to the greatest extent possible could decrease mountain plover habitat. The preferred alternative will continue to emphasize proper watershed management, but is unlikely to adversely affect this species or its habitat in the mixed desert shrub area. Since no known wintering locales or breeding sites have been found and no known prairie dog towns are located within this allotment, proper grazing management is not likely to jeopardize, destroy or adversely modify the habitat for the mountain plover or the black-tailed prairie dog..

5. Livestock Management
The proposed action would allow the existing livestock management to continue. The existing management is not causing any adverse impacts to the environment. The distribution and supply of livestock water is available for wildlife. Livestock under rotation grazing will continue to maintain or increase ground cover by stimulating growth of vegetation and by scattering litter which protects the soil from wind and water erosion.

6. Visual Resources
Visual resources will be managed to meet the Visual Resource Management class. All proposed management activities will be evaluated with regard to visual resource management and those project that are compatible with the character of the natural landscape will be encouraged. No management actions should be proposed that would degrade visual quality to the extent that a change in any VRM class will result. The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Water Quality
Livestock grazing will not have a significant influence on water quality. The ground water is not affected by livestock grazing.

8. Air Quality
The proposed action will not have an effect on the air quality. The air quality will remain virtually the same as present.

9. Recreation, Caves and Karst
Grazing should have little or no impact on the dispersed recreational opportunities within Allotment 63002, since the recreational use of these public lands have low potential. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views or hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

If monitoring determines that significant caves or karst features are found and are being affected by grazing, additional protective measures will be required. The protective measures could include, but are not limited to, the following actions: Fencing sinks, cave entrances or arroyos from multiple-use impacts; removing check-dams, erosion control projects and stock ponds; closing roads; no chemical vegetation removal. The area around significant caves or karst features should be treated sensitively, so no adverse impacts affect the cave or karst feature.

B. Impacts of the No Livestock Grazing Alternative

1. Soils
The soil will not be subjected to compaction, chipping or standing vegetation reduction that is associated with livestock grazing. The stability and development of the soil would be about the same as with grazing. Soil compaction would be reduced on the allotment around drinking troughs and along trails.

2. Vegetation
There would be small change in the types and amounts of vegetation found within the allotment. It is expected that the number of plant species found within the allotment will remain the same. Vegetation will continue to be utilized by wildlife but the removal of the standing vegetation by livestock would be absent.

3. Wildlife
There would be no competition between livestock and wildlife for forage or cover.

4. Threatened and Endangered Species
There would be no change in the bald eagle, mountain plover or black-tailed prairie dog habitat if the No Grazing alternative was selected.

5. Livestock Management
Under the No Grazing alternative there would be no grazing on the federal land in the area of Allotment 63002. This would have an adverse economic impact to the livestock operation.

6. Visual Resources
No change in the visual resources, scale, land-form, and color will occur with the No Grazing alternative.

7. Water Quality
A slight improvement in surface water quality may be achieved with the No Grazing alternative. This is anticipated because the removal of standing vegetation will not be occurring to the degree allowed in the proposed action. More standing vegetation will slow storm runoff, which will reduce sedimentation of the stream. Ground water would not be affected by choosing the no grazing alternative.

8. Air Quality
There would be no change to the air quality with the No Grazing alternative.

9. Recreation, Caves and Karst.
This alternative would have no effect on recreation, caves or karst features.

V. Cumulative Impacts

A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

The analysis of cumulative impacts is driven by major resource issues. The action considered is this environmental assessment (EA) is the authorization of livestock grazing on Allotment #63002.

The incremental impact of issuing a grazing permit on these resources must be analyzed in the contexts of impacts from other actions. Other BLM actions that could have impacts on the identified resources include: livestock authorization on other allotments within the same plant community; oil and gas activities, rights-of-way and recreation use.

All authorized activities which occur on public land can also take place on state and private lands. Many of the actions which could contribute to cumulative impacts have occurred over many years. For example, impacts from open-range livestock grazing in the last century are still being addressed today. Other activities, such as oil and gas activities, and recreation uses, are still occurring today, and are expected to continue into the foreseeable future to some degree.

The Proposed Action would not add incrementally to the cumulative impacts to threatened and endangered species. The conclusion that impacts to these resources from grazing authorization would not be significant are discussed in detail in Section III of the EA. All of the allotments that have permits or leases with BLM will have to go through scoping and analysis under NEPA. Allotment #63002 is surrounded by allotments that have or will be undergoing this process. If the proposed action is selected, there would be no change in the cumulative impacts since it does not vary from the current situation.

If the No-Grazing Alternative were chosen for this allotment, some cumulative impacts from grazing would be eliminated, but others would occur. Grazing would no longer be available as a vegetation management took, and public lands within the allotment would be less intensively managed. For example, control of noxious plant species would be less likely without allotment management. If the No Livestock Grazing alternative is selected, there would be little change in the overall cumulative impact as long as the surrounding allotments continue to be stocked at their current level. If the permitted numbers are reduced or eliminated on the surrounding ranches as well, the economics of the surrounding communities and or minority/low income populations would be negatively impacted.

Cumulative impacts of the grazing and no grazing alternatives were also considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document.

VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's, if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action.

VII. Mitigating Measures

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

VIII. Fundamentals of Rangeland Health

The fundamentals of rangeland health are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered (T&E) species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment.

Literature Citations

DeLay, L. and K. Johnson. 1998. Mountain plover survey on Bureau of Land Management Lands,
Roswell Field Office, NM, 1998. New Mexico Natural Heritage Program. 22 pp.

New Mexico Water Quality Control Commission. 1998. Water quality and water pollution control in New Mexico, 1998. NMED/SWQ-98/4.

New Mexico Water Quality Control Commission. 1995 State of New Mexico standards for interstate
and intrastate streams. 20 NMAC 6.1. 51 pp.

Sager, L 1996. A 1995 survey of mountain plovers in New Mexico. New Mexico Department of Game and Fish. Contract 95-516-66. 59 pp

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rational for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The proposed action will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997)

T. R. Kreager,
Assistant Field Office Manager - Resources

Date